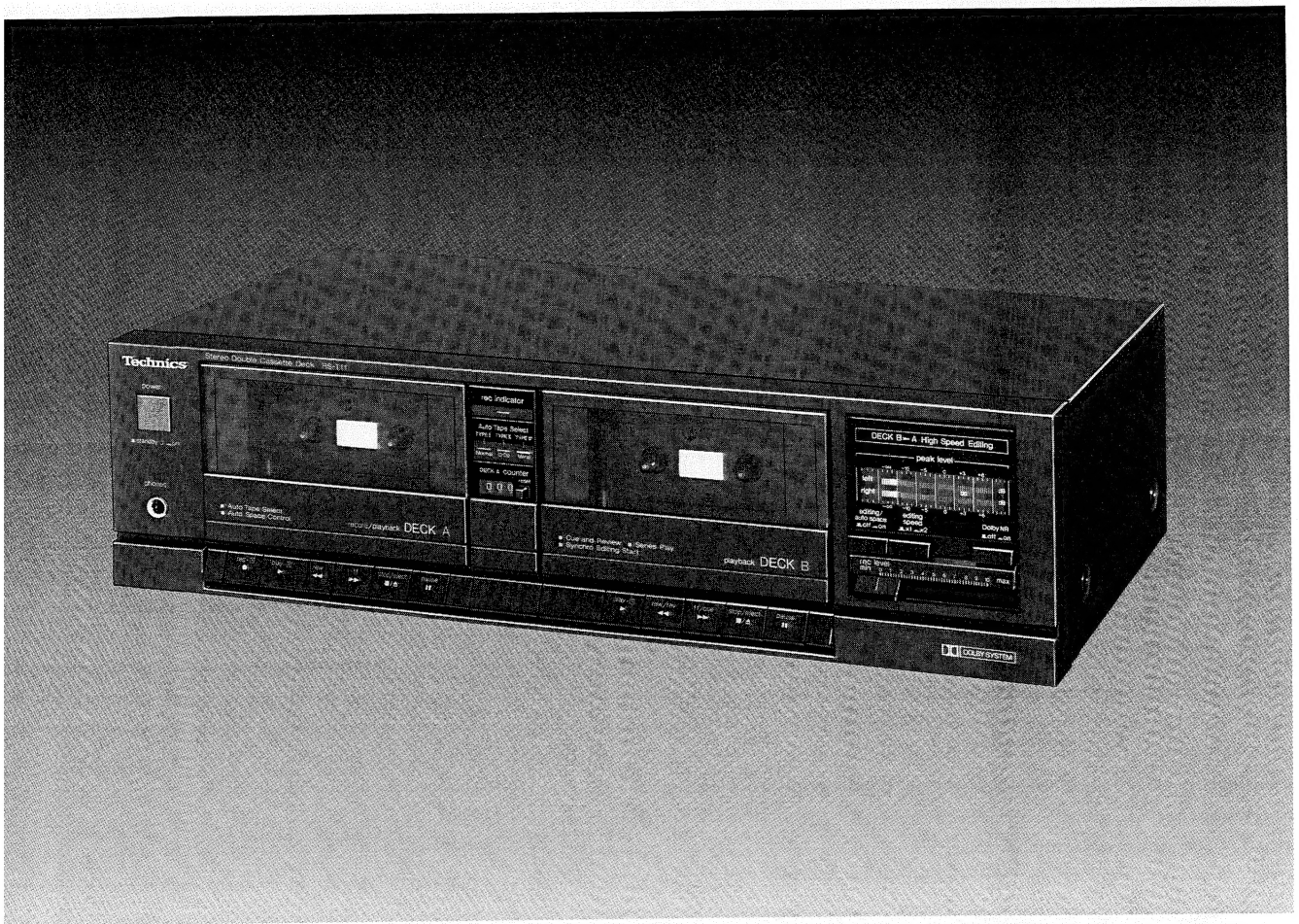


Technics

Stereo Double Cassette Deck

RS-T11

OPERATING INSTRUCTIONS



- These instructions also apply to units of different colour.

Before operating this unit, please read these instructions completely.

Dear Stereo Fan

We want to thank you for selecting this product and to welcome you to the growing family of satisfied Technics product owners around the world. We feel certain you will get maximum enjoyment

from this new addition to your home.

Please read these operating instructions carefully, and be sure to keep them handy for convenient reference.

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Accessories

- Stereo connection cables (Refer to page 3.) 2
- AC power supply cord (Refer to page 3.) 1

Before Use

Be sure to disconnect the mains cord before adjusting the voltage selector.

Use a minus (–) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used.

(If the power supply in your area is 117 V or 120 V, set to the "127 V" position.)

Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries; the correct voltage is already set.)

Suggestions for Safety

■ Use a standard electrical AC wall outlet

1. **Use from an AC power source of high voltage, such as for air conditioners, is very dangerous.**

Be extremely careful not to make a connection to the electrical outlet for a large air conditioner or central-heating unit which uses high voltage, because there is the possibility of fire.

2. **A DC power source cannot be used.**

Be sure to check the power source carefully, especially on a ship or other place where DC is used.

■ Connection and removal of the power cord plug

1. **Wet hands are dangerous.**
A dangerous electric shock may result if the plug is touched by wet hands.
2. **Don't pull the power cord.**
Always grasp the plug; never pull the cord itself.

■ Never attempt to repair or reconstruct this unit

A serious electric shock might occur if this unit is repaired, disassembled or reconstructed by unauthorized persons, or if the internal parts are accidentally touched.

■ For families with children

Never permit children to put anything, especially metal, inside this unit. A serious electric shock or malfunction could occur if articles such as coins, needles, screwdrivers, etc. are inserted through the ventilation holes, etc. of this unit.

■ Turn off after use

If the unit is left for a long time with the power on, this will not only shorten its useful operation life, but may also cause other unexpected trouble.

■ If water is spilled on the unit

Be extremely careful if water is spilled on the unit, because a fire or serious electric shock might occur. Immediately disconnect the power cord plug, and consult with your dealer.

■ Place the unit where it will be well ventilated, and away from direct sunlight

Place this unit at least 10 cm (4") away from wall surfaces, etc., and away from direct sunlight.

■ Keep the unit away from heaters, etc.

Heat can damage the external surfaces as well as internal circuits and components.

■ Avoid spray-type insecticides

Insecticides might cause cracks or "cloudiness" in the cabinet and plastic parts of this unit. The gas used in such sprays might, moreover, be ignited suddenly.

■ Never use alcohol or paint thinner

These and similar chemicals should never be used, because they may damage the finish.

■ If trouble occurs

If, during operation, the sound is interrupted or indicators no longer illuminate, or if abnormal odor or smoke is detected, immediately disconnect the power cord plug, and contact your dealer or an Authorized Service Center.

Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized service centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
Problems noted at all times		
Tape moves but no sound is heard.	The volume control of the stereo receiver is set to its minimum position.	• Adjust the volume control to the desired level.
	The input selector of the stereo receiver is not set to the "tape" position.	• Set to the "tape" position.
Distorted sound	The recording level is too high.	• Select the appropriate recording level.
Sound is low, poor tone, intermittent sound, noise.	Heads, capstan and/or pinch roller are dirty or tape damaged.	• Clean the heads, capstan and/or pinch roller, or try a new cassette tape.
Poor sound quality (especially in the high treble and low bass ranges)	The Dolby noise-reduction switch is not set properly.	• Set it to the correct position.
Recording is not possible.	The recording-level control of the cassette deck is at the "0" position.	• Select the appropriate recording level.
	Erase-prevention tabs have been removed.	• Attach tape to cover space left by removal of erase-prevention tabs.
Edit-recordings can't be made.	The editing/auto space switch is not set to the "on" position.	• Set to the "on" position.

Technical Specifications

■ CASSETTE DECK SECTION

Deck system	Stereo cassette deck
Track system	4-track, 2-channel
Heads	
(DECK A) REC/PLAY	Solid Permaloy head
Erasing	Double-gap ferrite head
(DECK B) PLAY	Solid Permaloy head
Motors	
(DECK A) Capstan/reel table drive	
2 speed electronically controlled DC motor	
(DECK B) Capstan/reel table drive	
2 speed electronically controlled DC motor	
Recording system	AC bias
Bias frequency	80 kHz
Erasing system	AC erase
Tape speed	4.8 cm/sec. (1-7/8 ips)
Frequency response (w/o Dolby N.R.)	
METAL	20 Hz~16 kHz (±15 dB)
	30 Hz~15 kHz (DIN)
CrO ₂	20 Hz~15 kHz (±15 dB)
	30 Hz~15 kHz (DIN)
NORMAL	20 Hz~15 kHz (±15 dB)
	30 Hz~15 kHz (DIN)
S/N	(signal level = max recording level, CrO ₂ type tape)
Dolby B NR on	66 dB (CCIR)
NR off	56 dB (A weighted)

Wow and flutter	0.08% (WRMS)
Fast Forward and Rewind Time	
	Approx. 105 seconds with C-60 cassette tape
Input sensitivity and impedance	
LINE	60 mV/47 kΩ
Output voltage and impedance	
LINE	400 mV/3.2 kΩ
HEADPHONES	80 mV/8 Ω

■ GENERAL

Power consumption	18W
Power supply	
For Australia	AC 50 Hz/60 Hz, 240V
For continental Europe	AC 50 Hz/60 Hz, 220V
For others	AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D)	430 × 120 × 228 mm
Weight	(16-15/16" × 4-23/32" × 8-31/32") 3.8 kg (8.4 lb.)

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.

About Cassette Tapes

Selection of cassette tapes

Do not use tape such as described below in this unit.

• 120-minute (or longer) tapes

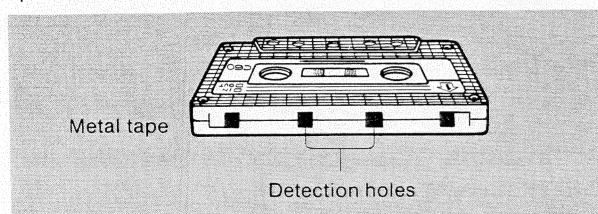
Because this tape is very thin, it might stretch during use, become tangled with rotating parts in this unit, and/or tape movement might not be stable.

• Fe-Cr tape (TYPE III)

The high range will be emphasized and a flat frequency response characteristic cannot be obtained.

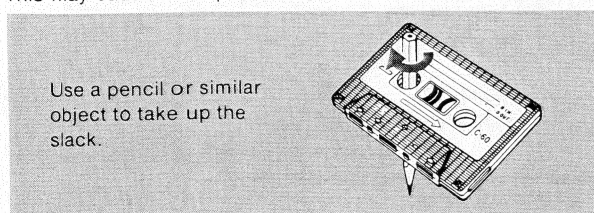
• Metal tape without detection holes

Recordings will be very distorted. (There is no playback problem however.)



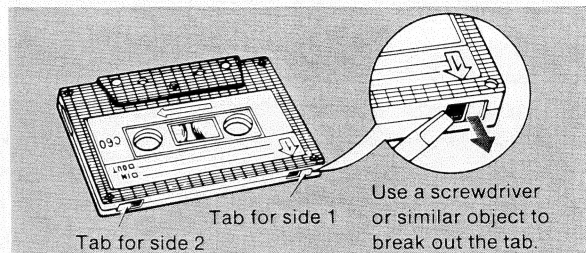
Tape slack

This may cause the tape to break.



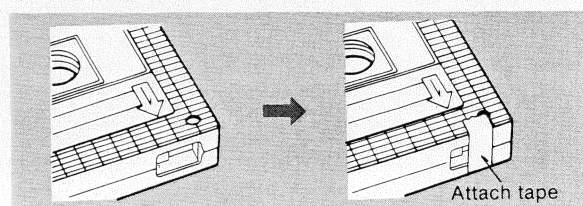
To prevent erasing of recorded sounds

Remove the erase-prevention tabs (thus preventing recording).



To record again

Cover the slot with adhesive tape.



Avoid tape storage in the following places

- Where the temperature is high (95° F/35° C or higher) or where the humidity is high (80% or higher).
- Where there is a strong magnetic field (near a speaker, on top of a TV, etc.).
- In direct sunlight.

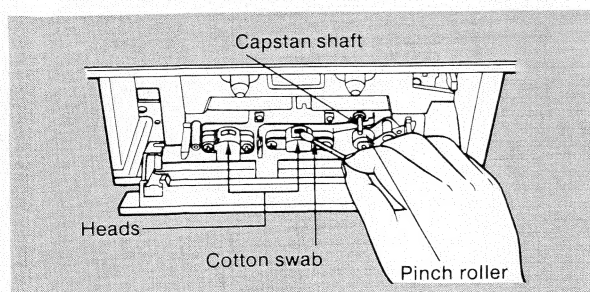
Maintenance

Head care

To assure sound quality for recording and playback, be sure to clean the heads after approximately every 10 hours of use.

- 1) Press the power switch to switch off the electrical power supply of this unit.
- 2) Press the stop/eject button to open the door of the cassette holder.
- 3) Clean the heads, pinch roller and the capstan shaft with a cotton swab (or with a soft, lint-free cloth) slightly moistened with alcohol.

Do not use any solution other than alcohol for head cleaning.



Head demagnetization

In order to maintain good sound quality during recording and playback, it is recommended that the head assembly be demagnetized when distortion or poor sound quality persist after cleaning the heads.

If the head assembly becomes magnetized, it could create noise in the recordings, loss of high-frequency response or erasure of valuable recordings. Several types of head demagnetizers are available and may be purchased separately at local electronics supply stores. Follow the instructions that are supplied with the device.

- Do not bring any type of metal objects or tools such as magnetic screwdrivers in contact with the head assembly.

Maintenance of external surfaces

To clean this unit, use a soft, dry cloth.

If the surfaces are extremely dirty, use a soft cloth, dipped into a soap-and-water solution or a weak detergent solution.

Wring the cloth well before wiping the unit.

Wipe once again with a soft, dry cloth.

Never use alcohol, paint thinner, benzene, nor a chemically treated cloth to clean this unit.

Such chemicals may damage the finish of your unit.

Edit-Recording

"Edit-recording" is recording from one tape to another while making some changes.

Notes:

- In order to avoid incorrect operation, be sure to set the editing/auto space switch to "off" and press the stop/eject button of "DECK A" after the edit-recording is finished.
- Recording level as well as equalizer effects and Dolby noise-reduction effects are recorded on to the tape in "DECK A" exactly as they were originally recorded on the tape in "DECK B".
- To avoid changes of the tone quality, use the same type of tape in "DECK A" as the type to be played back in "DECK B".

1 "on" (→)

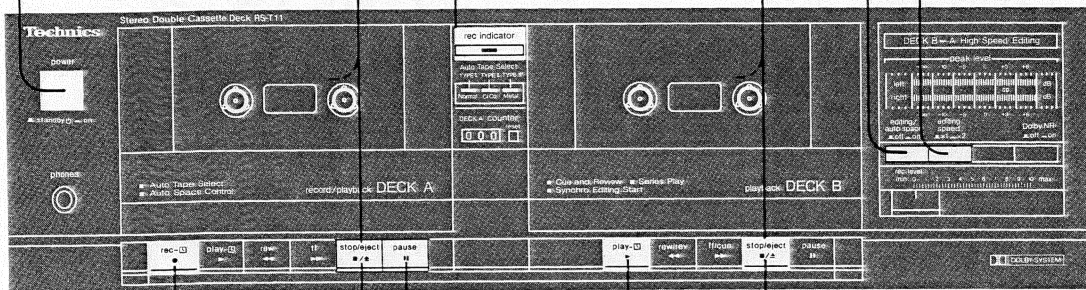
2 Press, then insert the tape to be used for recording.

3 Press, then insert the tape to be used for playback.

4 "on" (→)

5 Select the tape speed.

- "1" \times "1": For operation at the normal tape speed
- "2" \times "2": For operation at double speed



6 Press.

The recording indicator will be illuminated.
(Recording stand-by mode)

Press to stop the edit-recording.

Press to stop the edit-recording temporarily.

7 Press.

("DECK B" playback and "DECK A" recording will then begin.)

Press to stop the edit-recording temporarily. After about 4 seconds, "DECK A" will automatically change to the recording stand-by mode. (This will make a non-recorded space between tunes.) To start edit-recording again, press the playback button on "DECK B".

To find the tune you want to record:

- ① Press the pause button of "DECK A".
- ② On "DECK B", find the tune you want to record.
- ③ Release the pause button of "DECK A".
- ④ Press the play button of "DECK B".

Timer Recording/Playback

If an audio timer (option) is connected to this unit, recording of a radio broadcast, or tape playback, will automatically begin at the preset time. Connect the AC power cord of this unit to the power source outlet of the timer. (See the operating instructions of the timer for detailed information.)

Note:

When setting the timer for timer-controlled recording or playback, the timer should be set to a time which will extend beyond the time of one side of the tape.

This is because, if the timer switches OFF before the tape reaches its end, the capstan and pinch roller remain pressed together, which might adversely affect their performance.

Timer recording

1. Prepare for recording

(Follow steps 1 through 8 of "Recording" on page 5. After adjusting the recording level, press the stop/eject button and the pause button.)

2. Set the timer to the desired recording-start time.

(Power will be off.)

3. Press the record button.

(At the set time, the power will come on and the broadcast will be recorded.)

After setting the timer

Make sure that the power switch is set to the "on" position.

Timer playback

1. Rewind the tape to the position from which you want playback to begin. (Refer to page 4.)

2. Set the timer to the desired playback-start time.

(Power will be off.)

3. Press the playback button of whichever deck you want to use, "DECK A" or "DECK B".

(At the set time, power will come on and the playback will begin.)



Note:

For timer playback, playback always starts from "DECK A" in the series playback mode.

After setting the timer

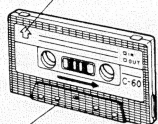
Make sure that the power switch is set to the "on" position.

Recording

1 "on" ( → )





2 Press, then insert the tape to be used for recording.

The side to be recorded facing outward.





Part where tape is exposed facing downward.

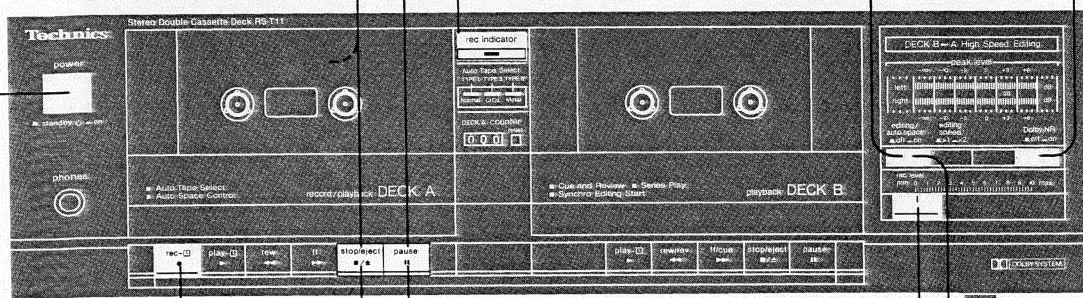
3 Press.

4 "off" ( → ):
"on" ( → ):

Tape recording without the Dolby noise-reduction system.

Tape recording with the Dolby noise-reduction system. (Refer to page 4.)

5 "off" ( → )



6 Press.
The recording indicator will be illuminated. (Recording stand-by mode)

8 Adjust the recording level.
(See below.)

7 Begin the program source to be recorded.

Press to stop the recording.

9 Press.
(Recording will begin.)

Press to temporarily stop the recording.

Press to make non-recorded spaces between tunes. (See below.)

To make non-recorded spaces between tunes

With this unit, by following the steps below, it is possible to make non-recorded spaces (four seconds long) between tunes.

- **During recording, press the editing/auto space switch.**
After about 4 seconds, "DECK A" will automatically change to the recording stand-by mode.
- **To start the recording again, set the switch to the "off" position.** (Recording will begin.)

To erase recorded sounds

1. Insert the recorded tape cassette into the cassette holder of "DECK A".
2. Set the Dolby noise-reduction switch to the "off" position.
3. Set the recording level control to the minimum ("0") position.
4. Press the record button, and then let the tape run.

Note that any sounds on the tape will be automatically erased if a new recording is made on that part of the tape.

Your attention is drawn to the fact that recording pre-recorded tapes or other published or broadcast material may infringe copyright laws.

Note:

Only "DECK A" can be used for recording. "DECK B" has no record capability.

Note:

Sounds from the deck cannot be heard while the editing/auto space switch is pressed in, so set the tape-monitor switch (on the receiver, etc.) to the "source" position to be able to monitor the sound.

Adjustment of the recording level


The numbers which you should use as a guide for the adjustment of the tape level will differ depending upon the type of tape used.



Tape type	Normal (TYPE I) CrO ₂ (TYPE II)	Metal (TYPE IV)
Level (Dolby NR off)	0dB	+3dB
Level (Dolby NR on)	+3dB	+6dB

Playback

Notes:

- "DECK A" and "DECK B" cannot both be used for playback at the same time.
- Do not press the stop/eject button while the tape is moving, doing so might cause a malfunction or damage the tape.

1 "on" ()

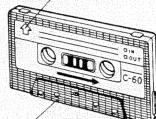
2 "off" (): For playing back tapes which were not recorded through a Dolby noise-reduction system.
 "on" (): For playing back tapes which were recorded through a Dolby noise-reduction system. (See below.)

When using "DECK A"

3 Press, then insert the tape cassette.

4 Press. (Playback will begin.)

The side to be played back facing outward.

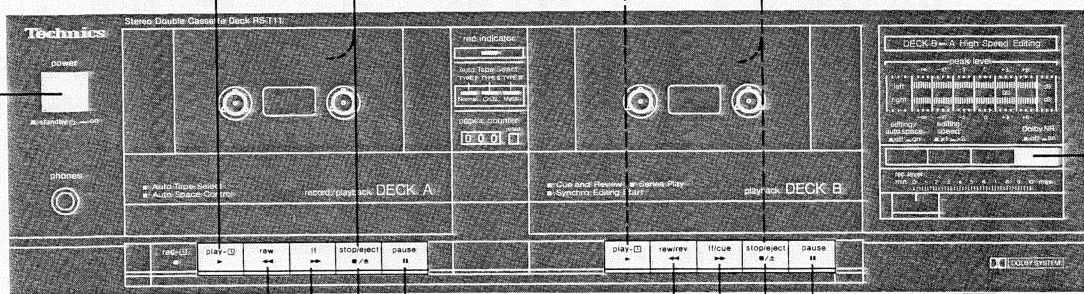


Part where tape is exposed facing downward.

When using "DECK B"

3 Press, then insert the tape cassette.

4 Press. (Playback will begin.)



Press to rewind the tape.

Press to advance the tape.

Press to stop the tape.

Press to stop the tape temporarily.

Press to stop the tape temporarily.

Press to stop the tape.

When in the stop mode, press this button to advance the tape rapidly. When in the play mode, press this button to fast forward the tape while monitoring the sound.

When in the stop mode, press this button to rewind the tape rapidly. When in the play mode, press this button to rewind the tape while monitoring the sound.

Dolby noise-reduction system

The Dolby noise reduction system boosts low level high frequency signals during recording. During playback, these high frequency signals are reduced by a corresponding amount and, therefore, noise is reduced.

This unit uses the Dolby-B type noise-reduction system.

Dolby noise-reduction system manufactured under license from Dolby Laboratories Licensing Corporation.

"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Automatic tape selector system

This cassette deck automatically detects the type of tape being used, and adjusts for the proper bias and equalization.

The tape-select indicator indicates the type of tape being used in "DECK A".

"Metal" lights when no tape has been loaded in the cassette holder of "DECK A".

Series playback

Continuous playback from one side of a tape in "DECK A" to one side of a tape in "DECK B" (or from "DECK B" to "DECK A") is possible. To do so, simply follow the steps below instead of step 4 on page 4.

• When starting from "DECK A"

First press the playback button on "DECK A", and then press the playback button on "DECK B".

• When starting from "DECK B"

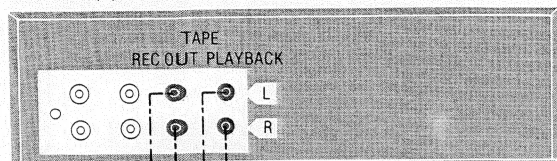
First press the playback button on "DECK B", and then press the playback button on "DECK A".

Connections

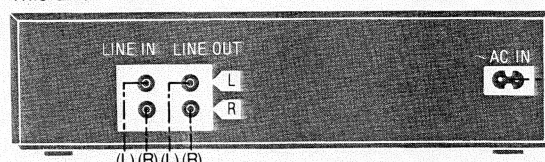
Placement Hints

If this unit is placed near a stereo receiver, a "hum" noise may be heard during tape playback, recording, or AM reception of the receiver.
If this occurs, leave as much space as possible between the units, or place them where there is the least amount of "hum".

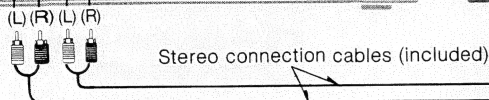
Receiver (option)



This unit



AC power supply cord (included)



Stereo connection cables (included)

The configuration of the AC outlet and AC power supply cord differs according to area.

Household AC outlet

Front Panel Controls and Functions

Headphones jack (phones)

Power "standby" switch (power "standby" switch)

This switch turns on and off the secondary circuit power only. The unit is in the "stand-by" condition when this switch is set to the "standby" position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

Tape-select indicators (Auto Tape Select)

The tape selector setting changes automatically, and the indicator indicates the type of tape being used in "DECK A".

"DECK A" counter/reset button (DECK A counter/reset)

This indicates the amount of tape travel of "DECK A". When this button is pressed, the readout will be reset to "000".

Editing tape-speed selector (editing speed)

Press to select the tape speed for edit-recording.

Editing/auto space switch (editing/auto space)

(Refer to pages 5, 6.)

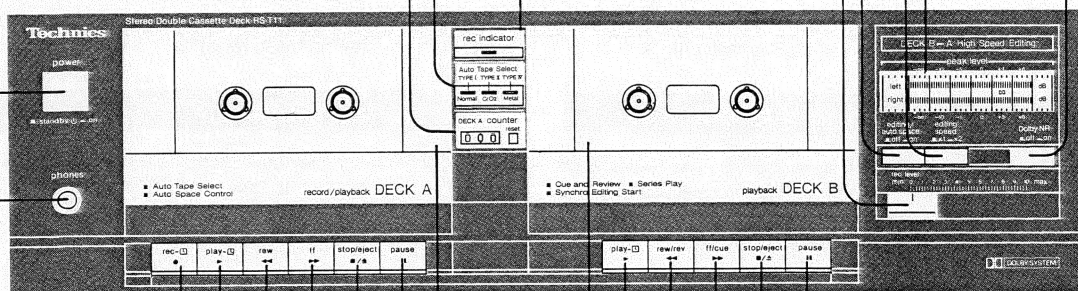
Recording level control (rec level)

Recording indicator (rec indicator)

Level meters (peak level)

During recording, these meters indicate the recording level. The level is adjusted by using the recording level control. During playback, they indicate the level of the recorded sound.

Dolby noise-reduction switch (Dolby NR)



When using "DECK A"

Record button (rec-□ / ●)

Playback button (play-□ / ▶)

Rewind button (rew/◀◀)

Fast-forward button (ff/▶▶)

Stop/eject button (stop/eject/■ / ▲)

Pause button (pause/||)

Cassette holder

When using "DECK B"

Pause button (pause/||)

Stop/eject button (stop/eject/■ / ▲)

Press this button to stop the tape during recording or playback, and to open the cassette holder.

Fast-forward/cue button (ff/cue/▶▶)

(Refer to page 4.)

Rewind/review button (rew/rev/◀◀)

(Refer to page 4.)

Playback button (play-□ / ▶)

Cassette holder